

REMARKS

Claim Rejections under 35 U.S.C. § 103

Claims 50-53 and 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over the non-patent literature, Bayliss, et al., "The Combined Effect of Hydrogen Peroxide and Ultraviolet Irradiation on Bacterial Spores", Journal of Applied Bacteriology 47:263-269 (1979) in view of Blidschun et al. (U.S. Patent No. 4,680,163). In addition claims 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayliss in view of Blidschun et al. (U.S. Patent No. 4,680,163) and further in view of Clark et al. (U.S. Patent No. 5,925,885). For the reasons set forth below, applicants respectfully disagree and request the Examiner to reconsider these rejections.

Claim 50

The Examiner has failed to make a prima facie case for obviousness under 35 U.S.C. § 103(a) with regard to claim 50. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP § 2143 (Emphasis added).

In this case none of the cited references teaches or suggests “spraying an electrically charged photosensitizer onto the contaminated surface of a person-occupiable space, in an environment open to the person-occupiable space” (emphasis added) as specified in claim 50.

The Examiner fails to cite any source that teaches or suggests this missing element. “To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” MPEP § 2143.03 (citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)). Thus, since the Examiner has failed to make a *prima facie* case for obviousness as to claim 50, applicants respectfully request that the rejection of this claim be reconsidered and withdrawn.

Claim 54

The Examiner has improperly rejected claim 54 under 35 U.S.C. 103(a) over Bayliss in view of Blidschun and further in view of Clark. In particular, the Examiner states on page 5 of the Detailed Action that “Clark teaches that although a continuous beam is possible to sterilize microorganisms, the high intensity of these pulses of light results in a unique [bactericidal] effect not observed when the same energy is provided at low intensity in sustained or continuous wavelength applications [of ultraviolet light] (See Specification, col. 11, lines 18-22).”

(Emphasis supplied by Examiner). However, as stated in the Manual of Patent Examining Procedure §2143.01, “[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or modification to make the proposed modification.” (MPEP §2143.01, citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)).

In this case Clark et al. make it abundantly clear that an essential part of their invention is the use of a flashlamp to produce high-energy, short-duration pulses of light for sterilization. Indeed, all of the independent claims recite a limitation such as “a flashlamp system for generating high-intensity, short-duration pulses of polychromatic light” (claim 1). Furthermore, as indicated by Clark et al. in the paragraph of the specification cited by the Examiner, sustained or continuous wavelength illumination is inadequate in their system. By comparison pulsed light systems use less energy to generate greater light intensities and thus produce unique bactericidal effects not seen with continuous wavelength illumination systems. Modifying Clark et al. to use a continuous illumination system renders the invention of Clark et al. “unsatisfactory for its intended purpose” and therefore the rejection of claim 54 based on the above combination of references is improper. Applicants respectfully request reconsideration and withdrawal of the rejection of claim 54.

II. Conclusion

Accordingly, Applicants respectfully submit that all of the independent and dependent claims are allowable over the prior art of record.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present



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application is in condition for allowance. If the Examiner disagrees, he is invited to telephone the undersigned at the number provided so that an interview may be scheduled.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

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